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<110> Ono, Yuichi
Nakagawa, Yasuko
Sakamoto, Yoshimasa

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 420 425 430
 Asp His Asp Cys Val Asp Lys Ser Asp Glu Val Asn Cys Ser Cys His
 435 440 445
 Ser Gln Gly Leu Val Glu Cys Thr Ser Gly Gln Cys Ile Pro Ser Thr
 450 455 460
 Phe Gln Cys Asp Gly Asp Glu Asp Cys Lys Asp Gly Ser Asp Glu Glu
 465 470 475 480
 Asn Cys Ser Asp Ser Gln Thr Pro Cys Pro Glu Gly Glu Gln Gly Cys
 485 490 495
 Phe Gly Ser Ser Cys Val Glu Ser Cys Ala Gly Ser Ser Leu Cys Asp
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 Ser Asp Ser Ser Leu Ser Asn Cys Ser Gln Cys Glu Pro Ile Thr Leu
 515 520 525
 Glu Leu Cys Met Asn Leu Leu Tyr Asn His Thr His Tyr Pro Asn Tyr
 530 535 540
 Leu Gly His Arg Thr Gln Lys Glu Ala Ser Ile Ser Trp Glu Ser Ser
 545 550 555 560
 Leu Phe Pro Ala Leu Val Gln Thr Asn Cys Tyr Lys Tyr Leu Met Phe
 565 570 575
 Phe Ala Cys Thr Ile Leu Val Pro Lys Cys Asp Val Asn Thr Gly Gln
 580 585 590

Arg Ile Pro Pro Cys Arg Leu Leu Cys Glu His Ser Lys Glu Arg Cys
 595 600 605
 Glu Ser Val Leu Gly Ile Val Gly Leu Gln Trp Pro Glu Asp Thr Asp
 610 615 620
 Cys Asn Gln Phe Pro Glu Glu Ser Ser Asp Asn Gln Thr Cys Leu Leu
 625 630 635 640
 Pro Asn Glu Asp Val Glu Glu Cys Ser Pro Ser His Phe Lys Cys Arg
 645 650 655
 Ser Gly Arg Cys Val Leu Gly Ser Arg Arg Cys Asp Gly Gln Ala Asp
 660 665 670
 Cys Asp Asp Asp Ser Asp Glu Glu Asn Cys Gly Cys Lys Glu Arg Ala
 675 680 685
 Leu Trp Glu Cys Pro Phe Asn Lys Gln Cys Leu Lys His Thr Leu Ile
 690 695 700
 Cys Asp Gly Phe Pro Asp Cys Pro Asp Ser Met Asp Glu Lys Asn Cys
 705 710 715 720
 Ser Phe Cys Gln Asp Asn Glu Leu Glu Cys Ala Asn His Glu Cys Val
 725 730 735
 Pro Arg Asp Leu Trp Cys Asp Gly Trp Val Asp Cys Ser Asp Ser Ser
 740 745 750
 Asp Glu Trp Gly Cys Val Thr Leu Ser Lys Asn Gly Asn Ser Ser Ser
 755 760 765
 Leu Leu Thr Val His Lys Ser Ala Lys Glu His His Val Cys Ala Asp
 770 775 780
 Gly Trp Arg Glu Thr Leu Ser Gln Leu Ala Cys Lys Gln Met Gly Leu
 785 790 795 800
 Gly Glu Pro Ser Val Thr Lys Leu Ile Pro Gly Gln Glu Gly Gln Gln
 805 810 815
 Trp Leu Arg Leu Tyr Pro Asn Trp Glu Asn Leu Asn Gly Ser Thr Leu
 820 825 830
 Gln Glu Leu Leu Val Tyr Arg His Ser Cys Pro Ser Arg Ser Glu Ile
 835 840 845
 Ser Leu Leu Cys Ser Lys Gln Asp Cys Gly Arg Arg Pro Ala Ala Arg
 850 855 860
 Met Asn Lys Arg Ile Leu Gly Gly Arg Thr Ser Arg Pro Gly Arg Trp
 865 870 875 880
 Pro Trp Gln Cys Ser Leu Gln Ser Glu Pro Ser Gly His Ile Cys Gly
 885 890 895
 Cys Val Leu Ile Ala Lys Lys Trp Val Leu Thr Val Ala His Cys Phe
 900 905 910
 Glu Gly Arg Glu Asp Ala Asp Val Trp Lys Val Val Phe Gly Ile Asn

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Asn Leu Asp His Pro Ser Gly Phe Met Gln Thr Arg Phe Val Lys Thr		
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Ile Leu Leu His Pro Arg Tyr Ser Arg Ala Val Val Asp Tyr Asp Ile		
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Ser Val Val Glu Leu Ser Asp Asp Ile Asn Glu Thr Ser Tyr Val Arg		
	965	970
Pro Val Cys Leu Pro Ser Pro Glu Glu Tyr Leu Glu Pro Asp Thr Tyr		
	980	985
Cys Tyr Ile Thr Gly Trp Gly His Met Gly Asn Lys Met Pro Phe Lys		
	995	1000
Leu Gln Glu Gly Glu Val Arg Ile Ile Pro Leu Glu Gln Cys Gln		
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Ser Tyr Phe Asp Met Lys Thr Ile Thr Asn Arg Met Ile Cys Ala		
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Gly Tyr Glu Ser Gly Thr Val Asp Ser Cys Met Gly Asp Ser Gly		
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Gly Pro Leu Val Cys Glu Arg Pro Gly Gly Gln Trp Thr Leu Phe		
	1055	1060
Gly Leu Thr Ser Trp Gly Ser Val Cys Phe Ser Lys Val Leu Gly		
	1070	1075
Pro Gly Val Tyr Ser Asn Val Ser Tyr Phe Val Gly Trp Ile Glu		
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Leu Val Leu Ile Pro Cys Ile Cys Ala Leu Val Leu Leu Leu Val Ile		
	50	55
Leu Leu Ser Tyr Val Gly Thr Leu Gln Lys Val Tyr Phe Lys Ser Asn		
	65	70
Gly Ser Glu Pro Leu Val Thr Asp Gly Glu Ile Gln Gly Ser Asp Val		
		75
		80

85					90					95					
Ile	Leu	Thr	Asn	Thr	Ile	Tyr	Asn	Gln	Ser	Thr	Val	Val	Ser	Thr	Ala
100					105					110					
His	Pro	Asp	Gln	His	Val	Pro	Ala	Trp	Thr	Thr	Asp	Ala	Ser	Leu	Pro
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Gly	Asp	Gln	Ser	His	Arg	Asn	Thr	Ser	Ala	Cys	Met	Asn	Ile	Thr	His
	130					135					140				
Ser	Gln	Cys	Gln	Met	Leu	Pro	Tyr	His	Ala	Thr	Leu	Thr	Pro	Leu	Leu
145					150					155					160
Ser	Val	Val	Arg	Asn	Met	Glu	Met	Glu	Lys	Phe	Leu	Lys	Phe	Phe	Thr
				165					170					175	
Tyr	Leu	His	Arg	Leu	Ser	Cys	Tyr	Gln	His	Ile	Met	Leu	Phe	Gly	Cys
			180					185					190		
Thr	Leu	Ala	Phe	Pro	Glu	Cys	Ile	Ile	Asp	Gly	Asp	Asp	Ser	His	Gly
		195					200					205			
Leu	Leu	Pro	Cys	Arg	Ser	Phe	Cys	Glu	Ala	Ala	Lys	Glu	Gly	Cys	Glu
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Ser	Val	Leu	Gly	Met	Val	Asn	Tyr	Ser	Trp	Pro	Asp	Phe	Leu	Arg	Cys
225					230					235					240
Ser	Gln	Phe	Arg	Asn	Gln	Thr	Glu	Ser	Ser	Asn	Val	Ser	Arg	Ile	Cys
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Phe	Ser	Pro	Gln	Gln	Glu	Asn	Gly	Lys	Gln	Leu	Leu	Cys	Gly	Arg	Gly
			260					265					270		
Glu	Asn	Phe	Leu	Cys	Ala	Ser	Gly	Ile	Cys	Ile	Pro	Gly	Lys	Leu	Gln
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Tyr	Ser	Leu	Val	Cys	Asp	Gly	Tyr	Asp	Asp	Cys	Gly	Asp	Leu	Ser	Asp
				325					330					335	
Glu	Gln	Asn	Cys	Asp	Cys	Asn	Pro	Thr	Thr	Glu	His	Arg	Cys	Gly	Asp
		340						345					350		
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Val	Asp	Lys	Ser	Asp	Glu	Val	Asn	Cys	Ser	Cys	His	Ser	Gln	Gly	Leu
	370					375					380				
Val	Glu	Cys	Arg	Asn	Gly	Gln	Cys	Ile	Pro	Ser	Thr	Phe	Gln	Cys	Asp
385					390					395					400
Gly	Asp	Glu	Asp	Cys	Lys	Asp	Gly	Ser	Asp	Glu	Glu	Asn	Cys	Ser	Val

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Cys	Leu	Asp	Ser	Cys	Gly	Gly	Ser	Ser	Leu	Cys	Asp	Pro	Asn	Asn	Ser				
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Leu	Asn	Asn	Cys	Ser	Gln	Cys	Glu	Pro	Ile	Thr	Leu	Glu	Leu	Cys	Met				
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Asn	Leu	Pro	Tyr	Asn	Ser	Thr	Ser	Tyr	Pro	Asn	Tyr	Phe	Gly	His	Arg				
465					470					475					480				
Thr	Gln	Lys	Glu	Ala	Ser	Ile	Ser	Trp	Glu	Ser	Ser	Leu	Phe	Pro	Ala				
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Leu	Val	Gln	Thr	Asn	Cys	Tyr	Lys	Tyr	Leu	Met	Phe	Phe	Ser	Cys	Thr				
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Ile	Leu	Val	Pro	Lys	Cys	Asp	Val	Asn	Thr	Gly	Glu	Arg	Ile	Pro	Pro				
	515						520					525							
Cys	Arg	Ala	Leu	Cys	Glu	His	Ser	Lys	Glu	Arg	Cys	Glu	Ser	Val	Leu				
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Val	Leu	Ala	Ser	Arg	Arg	Cys	Asp	Gly	Gln	Ala	Asp	Cys	Asp	Asp	Asp				
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Pro	Ser	Asn	Lys	Gln	Cys	Leu	Lys	His	Thr	Val	Ile	Cys	Asp	Gly	Phe				
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Pro	Asp	Cys	Pro	Asp	Tyr	Met	Asp	Glu	Lys	Asn	Cys	Ser	Phe	Cys	Gln				
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Asp	Asp	Glu	Leu	Glu	Cys	Ala	Asn	His	Ala	Cys	Val	Ser	Arg	Asp	Leu				
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Trp	Cys	Asp	Gly	Glu	Ala	Asp	Cys	Ser	Asp	Ser	Ser	Asp	Glu	Trp	Asp				
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Cys	Val	Thr	Leu	Ser	Ile	Asn	Val	Asn	Ser	Ser	Ser	Phe	Leu	Met	Val				
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His	Arg	Ala	Ala	Thr	Glu	His	His	Val	Cys	Ala	Asp	Gly	Trp	Gln	Glu				
705					710					715					720				
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Val Thr Lys Leu Ile Gln Glu Gln Glu Lys Glu Pro Arg Trp Leu Thr
740 745 750
Leu His Ser Asn Trp Glu Ser Leu Asn Gly Thr Thr Leu His Glu Leu
755 760 765
Leu Val Asn Gly Gln Ser Cys Glu Ser Arg Ser Lys Ile Ser Leu Leu
770 775 780
Cys Thr Lys Gln Asp Cys Gly Arg Arg Pro Ala Ala Arg Met Asn Lys
785 790 795 800
Arg Ile Leu Gly Gly Arg Thr Ser Arg Pro Gly Arg Trp Pro Trp Gln
805 810 815
Cys Ser Leu Gln Ser Glu Pro Ser Gly His Ile Cys Gly Cys Val Leu
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Ile Ala Lys Lys Trp Val Leu Thr Val Ala His Cys Phe Glu Gly Arg
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Glu Asn Ala Ala Val Trp Lys Val Val Leu Gly Ile Asn Asn Leu Asp
850 855 860
His Pro Ser Val Phe Met Gln Thr Arg Phe Val Lys Thr Ile Ile Leu
865 870 875 880
His Pro Arg Tyr Ser Arg Ala Val Val Asp Tyr Asp Ile Ser Ile Val
885 890 895
Glu Leu Ser Glu Asp Ile Ser Glu Thr Gly Tyr Val Arg Pro Val Cys
900 905 910
Leu Pro Asn Pro Glu Gln Trp Leu Glu Pro Asp Thr Tyr Cys Tyr Ile
915 920 925
Thr Gly Trp Gly His Met Gly Asn Lys Met Pro Phe Lys Leu Gln Glu
930 935 940
Gly Glu Val Arg Ile Ile Ser Leu Glu His Cys Gln Ser Tyr Phe Asp
945 950 955 960
Met Lys Thr Ile Thr Thr Arg Met Ile Cys Ala Gly Tyr Glu Ser Gly
965 970 975
Thr Val Asp Ser Cys Met Gly Asp Ser Gly Gly Pro Leu Val Cys Glu
980 985 990
Lys Pro Gly Gly Arg Trp Thr Leu Phe Gly Leu Thr Ser Trp Gly Ser
995 1000 1005
Val Cys Phe Ser Lys Val Leu Gly Pro Gly Val Tyr Ser Asn Val Ser
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